

Please amend the application filed on even date herewith prior to proceeding with its examination.

**IN THE CLAIMS**

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Please cancel claims 1-25.

Please add new claims 26-49.

26. (New) 1. Use of a biological material containing:

- 10 a) a three-dimensional matrix based on a hyaluronic acid derivative and optionally
- b) chondrocytes and/or mesenchymal cells partially or completely differentiated towards chondrocytes,
- for the preparation of a graft surgically implantable into a joint cartilage said grafts
- 15 being suitable for the protection and/or recovery of said joint cartilage from a degenerative and/or inflammatory pathology, associated with the production of IL-1, selected from osteoarthritis, psoriatic and rheumatoid arthritis.

27. (New) The method according to claim 26, wherein, when the biological material contains the aforementioned cellular components (b) said graft

20 is an *in vitro* cartilage tissue to be surgically implanted *in vivo* inside the joint capsule in which one of said degenerative pathologies has been established with consequent degradation of the extracellular cartilage matrix.

28. (New) The method according to claim 27 wherein *in vitro* cartilage tissue further comprises the extracellular matrix produced by said chondrocytes or

25 mesenchymal cells partially or completely differentiated towards chondrocytes said extracellular matrix being both inside said *in vitro* cartilage tissue and once *in vivo* implanted also inside the joint cartilage affected by one of said degenerative pathologies.

29. (New) The method according to claim 28, wherein said graft is

30 surgically implantable at the beginning of the process of degradation of the molecules that make up the extracellular matrix of the cartilage.

30. (New) The method according to claim 26, wherein said graft is

surgically implantable in the later stages of said pathology too, when moderately and/or badly damaged areas of cartilage can be seen.

5 31. (New) The method according to claim 26, wherein the average molecular weight of hyaluronic acid in the hyaluronic acid derivative range between  $1 \times 10^5 \text{Da}$  and  $1 \times 10^6 \text{Da}$ .

32. (New) The method according to claim 31, wherein the average molecular weight of hyaluronic acid range between 200,000 and 750,000 Da.

33. (New) The method according to claim 26, wherein the hyaluronic acid derivative is selected from the class consisting of:

- 10 A) HA salified with organic and/or inorganic bases,
- B) HA esters with alcohols of the aliphatic, araliphatic, cycloaliphatic, aromatic, cyclic and heterocyclic series,
- C) HA amides with amine of the aliphatic, araliphatic, cycloaliphatic, aromatic, cyclic and heterocyclic series.
- 15 D) O-sulphated derivatives of HA,
- E) inner esters of HA with a percentage of esterification that does not exceed 20%,
- F) Deacetylated derivatives of HA obtained by the deacetylation of the N-acetyl-glucosamine fraction,
- 20 G) percarboxylated derivatives of HA obtained by oxidising the primary hydroxyl of the N-acetyl-glucosamine fraction with a degree of percarboxylation ranging between 0.1 and 100%.

34. (New) The method according to claim 33, wherein the HA derivative belongs to class (A) it is obtained by treating hyaluronic acid with sodium  
25 hydroxide.

35. (New) The method according to claim 34, wherein, when the HA derivative belongs to class (B) it has a percentage of esterification ranging from 50 to 100%, and the remaining percentage of unesterified HA is salified with organic or inorganic base.

30 36. (New) The method according to claim 35, wherein said base is sodium hydroxide.

37. (New) The method according to claim 33, wherein when the HA derivative

- belongs to class (C) it has a percentage of amidation ranging between 0.1 and 50% and the remaining portion is salified with organic and/or inorganic bases.
38. (New) The method according to claim 37, wherein said base is sodium hydroxide.
- 5 39. (New) The method according to claim 33, wherein when the HA derivative belongs to class (D) it has from 1 to 4 -OSO<sub>3</sub>H group per saccharide unit.
40. (New) The according to claim 33, wherein when the HA derivative belongs to class (E) it has a degree of esterification ranging from 0.05 to 10%, and the remaining percentage of non-esterified HA may be salified with organic and/or
- 10 inorganic bases.
41. (New) The method according to claim 40, wherein said base is sodium hydroxide.
42. (New) The method according to claim 33, wherein when the HA derivative belongs to class F) it has a percentage of deacetylation ranging between 0.1 and
- 15 30% and all the carboxy groups of HA are salified with organic and/or inorganic bases.
43. (New) The method according to claim 42, wherein said base is sodium hydroxide.
44. (New) The method according to claim 33, wherein, when the HA derivative
- 20 belongs to class (G), it has a degree of percarboxylation ranging from 25 to 75% and all the carboxy groups are salified with organic and/or inorganic bases.
45. (New) The method according to claim 44, wherein the base is sodium hydroxide.
46. (New) The method according to claim 26, wherein said three-dimensional
- 25 matrix is in a form selected from the group consisting of: a non-woven tissue, a tissue, microspheres, and a sponge.
47. (New) The method according to claim 26, wherein said HA derivative is a hyaluronic acid ester belonging to class (A).
48. (New) The method according to claim 47, wherein said HA ester is the
- 30 benzyl ester having a percentage of esterification ranging from 75 to 100%.
49. (New) The method according to claim 48, wherein said benzylester has a percentage of esterification of 100% and is in the form of a non-woven tissue.